

EESIP Seminar

Thursday April 18th, 2013 • 11:00-12:00 • Room 414 (Sindeband East), Schapiro CEPSR

Passive acoustics for cetacean observations

Prof. Olivier Adam

University of Paris

Passive acoustics is a complementary method to observe cetacean species. Mysticetes and odontocetes emit a large diversity of sounds and we can take the advantage of that to detect them, to identify their species and to track them. This presentation will illustrate several different methods through different applications including the study of Humpback whales songs, tracking sperm whales, and localization of blue whales.

Bio: **Olivier Adam** is Professor at University of Paris (France), specializing in Signal Processing and Bioacoustics. He has worked on cetacean projects since 2002.



Sound generation in *mysticeti* whales

Dorian Cazau

University of Paris

We make the link between the anatomy of whales and recorded sounds. We propose a new original acoustic model obtained from recent study of whale anatomy. This theoretical model is used to explain certain characteristics of emitted sounds, with application to Humpback whale songs.

Bio: **Dorian Cazau** is a PhD student specializing in acoustics. He work on the *mysticeti* sound generator and has propose a new original approach to explain the contents of the different sound units of Humpback whales. This work should help to understand the characteristics of the HW sound units and maybe a first step to the individual acoustic signature.

Host: Dan Ellis <dpwe@ee.columbia.edu>